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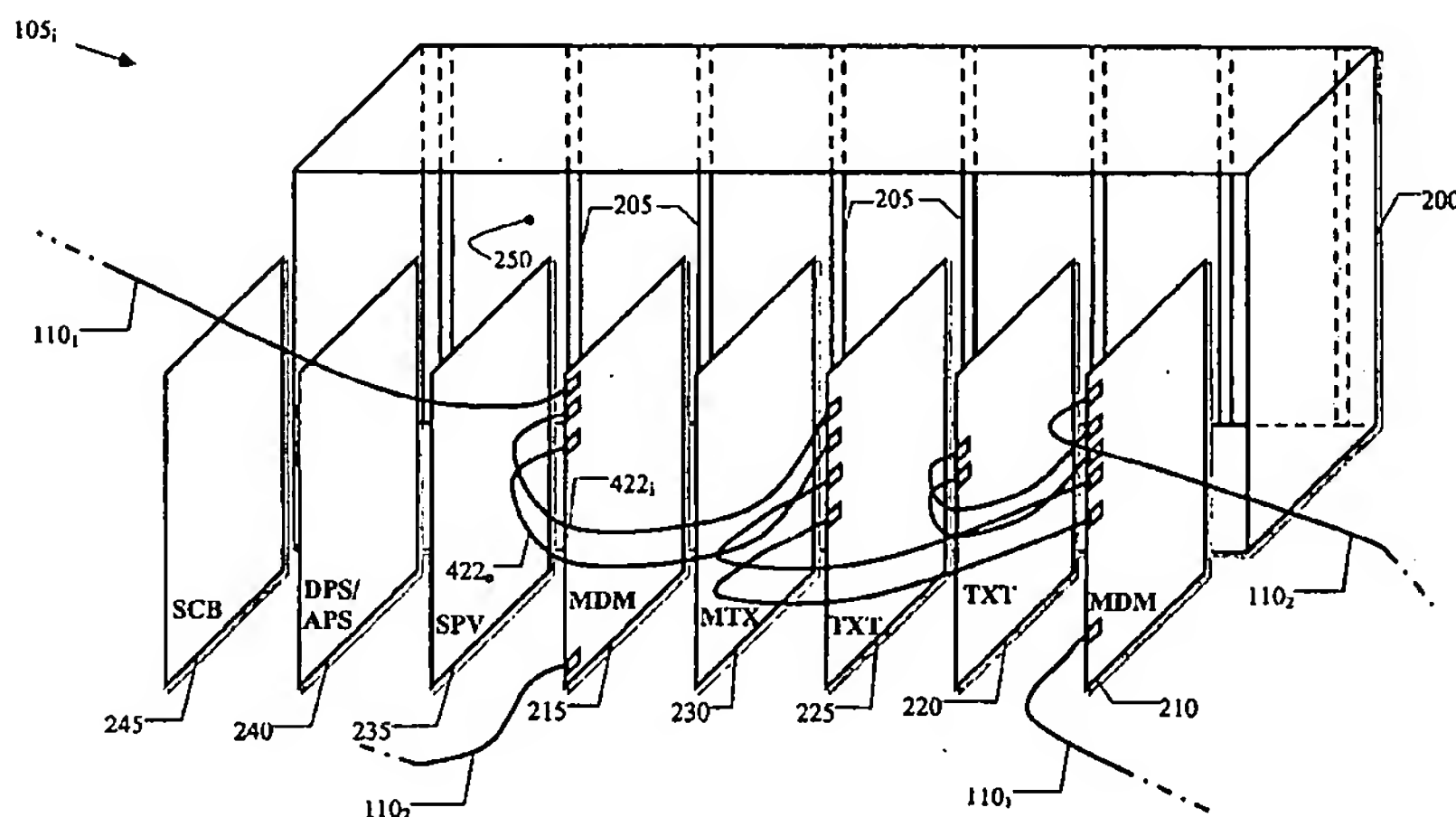
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(54) Title: A MODULAR, EASILY CONFIGURABLE AND EXPANDIBLE NODE STRUCTURE FOR AN OPTICAL COMMUNICATIONS NETWORK



(57) Abstract: A network node structure (105_i) for an optical communications network (100) comprises a housing (200) having a plurality of slots (205), and a plurality of cards (210-245) inserted in the slots. The plurality of cards (210, 215) includes at least one first card having an optical input (310) for receiving an input WDM optical signal from an optical line (110₁, 110₂) of the network, a first optical device (315) for extracting at least one component optical signal at a wavelength from the input WDM optical signal and at least one optical output (320₁-320₉) making available the at least one component optical signal. At least one second card (220, 225) is provided, distinct from the first card, having at least one socket (405-420) mechanically and electrically adapted to receiving one of a plurality of interchangeable electro-optical components (500). Each electro-optical component has an optical input (505), an optical-to-electrical conversion unit (525), an electrical output (515), and an electrical input (520), an electrical-to-optical conversion unit, an optical output (510).

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